

**CLEAN VERSION SHOWING CHANGES MADE TO CLAIMS**

Please cancel claims 1-3, 7 and 9 without prejudice.

Please replace claims 4, 5, 6, 8 and 10 with amended claims 4, 5, 6, 8 and 10, respectively, as presented below, and add new claims 13-31.

4. (Amended) A method for determining platelet functionality of a blood sample, the method comprising:

(a) dividing said sample into a plurality of aliquot samples;

(b) adding a selected amount of a platelet activating reagent to each of said aliquot samples, the amount of said platelet activating reagent in each said aliquot sample differing from the amount of said platelet activating reagent in each other aliquot sample;

(c) adding a sufficient amount of a clotting reagent to each said aliquot sample to promote clotting;

(d) performing a clotting test on each said aliquot sample; and

(e) determining said platelet functionality of said sample based on the difference in clotting times for each said aliquot sample, wherein said clotting times are determined by measuring a change in viscosity of said aliquot samples.

5. (Amended) The method of claim 6, wherein said platelet activating reagent is 1-O-alkyl-2-acetyl-sn-glyceryl-3-phosphorylcholine.

6. (Amended) The method of claim 4, wherein said platelet activating reagent is selected from the group consisting of 1-O-alkyl-2-acetyl-sn-glyceryl-3-phosphorylcholine, collagen, epinephrine, ristocetin and arachidonic acid.

8. (Amended) A method for determining clotting characteristics of a blood sample, said method comprising:

(a) dividing said sample into a plurality of aliquot samples;

(b) adding a selected amount of a clotting affecting reagent to each said aliquot sample, the amount of clotting affecting reagent in each said sample differing from the amount in each other aliquot sample;

(c) adding a sufficient amount of a clotting reagent to each said sample to promote clotting;

(d) performing a clotting test on each said aliquot sample; and

(e) determining clotting characteristics of said sample based on the difference in

AL6  
A7  
clotting times for each said aliquot sample.

10. (Amended) The method of claim 8, wherein said clotting affecting reagent is a platelet activating reagent.

7/26/26  
11. (New) The method of claim 4, wherein the amount of said platelet activating agent in each said aliquot sample is between about 0 and about 2.76 micrograms.

12. (New) The method of claim 4, wherein the concentration of said platelet activating reagent in each said aliquot sample is between about 0 and about 150 nM.

SUB 37  
13. (New) The method of claim 4, wherein at least one of said aliquot samples contains no platelet activating reagent and each remaining aliquot sample comprises different amounts of said platelet activating reagent.

14. (New) The method of claim 4, wherein said clotting reagent is kaolin.

15. (New) The method of claim 4, wherein the change in viscosity is determined using a plunger sensor technique.

16. (New) The method of claim 10, wherein said platelet activating reagent is selected from the group consisting of 1-O-alkyl-2-acetyl-sn-glycerol-3-phosphorylcholine, collagen, epinephrine, ristocetin and arachidonic acid.

17. (New) The method of claim 18, wherein said platelet activating reagent is 1-O-alkyl-2-acetyl-sn-glycerol-3-phosphorylcholine.

SUB 37  
18. (New) The method of claim 10, wherein the amount of said platelet activating agent in each said aliquot sample is between about 0 and about 2.76 micrograms.

19. (New) The method of claim 10, wherein the concentration of said platelet activating reagent in each said aliquot sample is between about 0 and about 150 nM.

20. (New) The method of claim 8, wherein at least one of said aliquot samples contains no platelet activating reagent, and wherein each remaining aliquot sample comprises different amounts of said platelet activating reagent.

SUB 37  
21. (New) The method of claim 8, wherein said clotting reagent is kaolin.

22. (New) The method of claim 8, wherein said clotting times are determined by measuring a change in viscosity of each of said aliquot samples.

23. (New) The method of claim 24, wherein said change in viscosity is measured by a plunger sensor technique.

SUB 37  
24. (New) A method for performing an activated clotting time test on a sample of

blood using a multicell test cartridge, said cartridge comprising at least a first, a second and a third test cell, each of said cells comprising a sufficient amount of a contact activator to achieve clotting, wherein said first cell further comprises a first amount of a platelet activating reagent and wherein said second cell comprises a second amount of said platelet activating reagent, said first and second amounts being different, said method comprising:

- (a) dividing said sample into first, second and third partial samples;  
(b) dispensing the first partial sample into the first test cell to form a first test mixture;  
(c) performing a first activated clotting time test on the first test mixture to obtain a first clotting time;  
(d) repeating the aforementioned steps of dispensing and performing an activated clotting time test on each of said second and third partial samples to obtain a second and third clotting time; and  
(e) comparing the clotting time of said first, second, and third partial samples to determine the activated clotting time of the sample of blood based on the clotting time times of said first, second and third partial samples.

25 27. (New) The method of claim 26, wherein said platelet activating reagent is selected from the group consisting of 1-O-alkyl-2-acetyl-sn-glycerol-3-phosphorylcholine, collagen, epinephrine, ristocetin and arachidonic acid.

26 28. (New) The method of claim 26, wherein said platelet activating reagent is 1-O-alkyl-2-acetyl-sn-glycerol-3-phosphorylcholine.

27 29. (New) The method of claim 26, wherein said clotting reagent is kaolin.

28 30. (New) The method of claim 26, wherein said clotting times are determined by measuring a change in viscosity of each of said aliquot samples.

29 31. (New) The method of claim 30, wherein said change in viscosity is measured by a plunger sensor technique.